



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/082,298	02/26/2002	Yen-Liang Kuan	MR1115-382	2788

4586 7590 11/19/2003

ROSENBERG, KLEIN & LEE
3458 ELLICOTT CENTER DRIVE-SUITE 101
ELLICOTT CITY, MD 21043

EXAMINER

WARD, AARON S

ART UNIT	PAPER NUMBER
----------	--------------

2675

2

DATE MAILED: 11/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/082,298

Applicant(s)

KUAN, YEN-LIANG

Examiner

Aaron S. Ward

Art Unit

2675

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☒ Claim(s) 2 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The abstract of the disclosure is objected to because the abstract exceeds 150 words in length. Correction is required. See MPEP § 608.01(b).

3. The specification should be written in "full, clear, concise, and exact terms." The specification is objected to because it is replete with terms which are not clear, concise and exact. The specification should be revised carefully. Examples of some unclear, inexact or verbose terms used in the specification are:

The heading on page 2, line 21 is misspelled.

Grammatically confusing sentences throughout, e.g., page 3, lines 25-26; page 4, lines 8-9, and in particular, page 5, lines 14-17; the objected sentence of page 5 discloses that the inventive power saving device consumes 100 times the power of the prior art mouse, which invention therefore is not power saving compared to the prior art.

4. Claim 1 is objected to because of the following informalities:

Art Unit: 2675

Lines 7-8: "both contacts" lacks antecedent basis.

Claim 2 is objected to because of the following informalities:

Line 1: "said sensor" lacks antecedent basis and should read "said at least one sensor" for consistency with claim 1.

Line 2: "a emitter" should read "an emitter."

Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 and 2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Lines 7-8 recite that "both contacts" of the at least one sensor connect to the battery and signal emitter. It is not clear how the contacts are interconnected, e.g., whether both contacts connect to both the battery and signal emitter, or one of the both contacts each connect to each of the battery and signal emitter, especially in view of Figures 2 and 3 which illustrate the sensor having 4 or 3 contacts, respectively (in contrast to "both contacts").

Lines 11-13 disclose disconnecting signal emitter power when the user doesn't use the computer and the mouse is in a suspending mode. It is not clear whether disuse of the computer causes the mouse suspending mode, or disconnection is caused by both disuse of the computer and the mouse being in suspending mode. Is power disconnected when the computer is used,

Art Unit: 2675

e.g., via keyboard or other input, while the mouse is not used? The specification discloses on page 5, lines 14-15 that the mouse sensor is used for wake-up control of the mouse. However, there is no teaching relating the use of a computer to a suspending mode of the mouse. Page 4, lines 22-23 disclose that disuse of the computer causes the computer to be in the suspending mode.

Line 14 recites “scanning continuously any more.” The claim did not previously disclose that the signal emitter scans continuously such that it is able to change its scanning continuously. Additionally, the phrase “any more” is unclear. Is scanning more frequently or more in duration not performed?

Claim 2 is rejected as being dependent on a rejected base claim.

Claim Rejections - 35 USC § 103

6. Claims 1 and 2 are rejected as best understood in view of the above rejections under 35 U.S.C. § 112.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hikasa, JP 10124250 A, in view of Zenz, Sr., U.S. Patent No. 5,841,425.

Art Unit: 2675

As to claim 1, Hikasa teaches in Figs. 1A and 1B a power saving device in a wireless mouse 3 with a signal emitter 7, a battery 6, and at least one sensor 3 connected to the battery 6 and the signal emitter 7 (via control means 5, see paragraph 11 which discloses “control means 5 supply cell 6 power supply to... the transmitting means 7”). The sensor 3 is triggered when a user holds the mouse, to connect the battery (see paragraph 11), and the supply power is stopped if the hand separates from the mouse (see paragraph 12).

Hikasa does not disclose that the wireless mouse housing has a scroll wheel, or that the housing has a window disposed on its upper surface.

Regarding the scroll wheel, it was notoriously well-known in the art at the time of the invention that mice have scroll wheels on their front.

Regarding the housing having a window disposed on its upper surface, Zenz, Sr. discloses in Figures 3A and 3B a mouse 30 having sensors 42, 44 disposed in the upper surface of the mouse housing. The sensors can be optical driver/receivers using infrared or visible light (column 4, line 47). Zenz, Sr. discloses in column 8, line 2-3 that a lens is used. A lens functions as a window.

It would be obvious for one of ordinary skill in the art at the time of invention to incorporate the window as taught by Zenz, Sr. into the mouse housing disclosed by Hikasa, to accommodate an optical driver/receiver for detecting a hand because a window allows optical signals to pass.

One of ordinary skill in the art would be motivated to make such a combination because Hikasa discloses the need for detection of a hand on the mouse, and Zenz, Sr. discloses that covering of an optical driver/receiver (sensor) results in detection or sensing of a hand (see

Art Unit: 2675

column 7, lines 60-62). Furthermore, use of an optical sensor as taught by Zenz, Sr. would eliminate the potential for electrical interference in the capacitive sensor taught by Hikasa.

As to claim 2, as explained above, the combined teaching of Hikasa and Zenz, Sr. discloses the power saving device of claim 1 with an emitter 74 and receiver 76 forming the sensor 42 (see Figures 6A and 6B of Zenz, Sr.). The signal is sent from the emitter 74 and received by the receiver 76. The received signal would inherently be the same as the sent signal because the same signal would be reflected by the finger to the receiver 76.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Junod et al., U.S. Patent No. 5,854,621, discloses a wireless mouse with a power saving mode wherein the transmitter is turned off.

Krukovsky, U.S. Patent No. 6,323,842, discloses a mouse with a disabling sensor disposed in the top of the housing.

Dunton, U.S. Patent No. 6,337,919, discloses a mouse with a window in the housing and an optical emitter and receiver disposed below the window.

Rosenberg et al., U.S. Patent No. 6,353,427, discloses a mouse having an optical switch wherein an actuator will function as long as the user covers the switch.


Art Unit: 2675

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron S. Ward whose telephone number is (703) 305-8992. The examiner can normally be reached on Monday - Friday, 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven J. Saras can be reached on (703) 305-9720. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

ASW



STEVEN SARAS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600